

The EpiNotes Newsletter



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**
Division of Public Health

2019; Vol. 18 No. 1

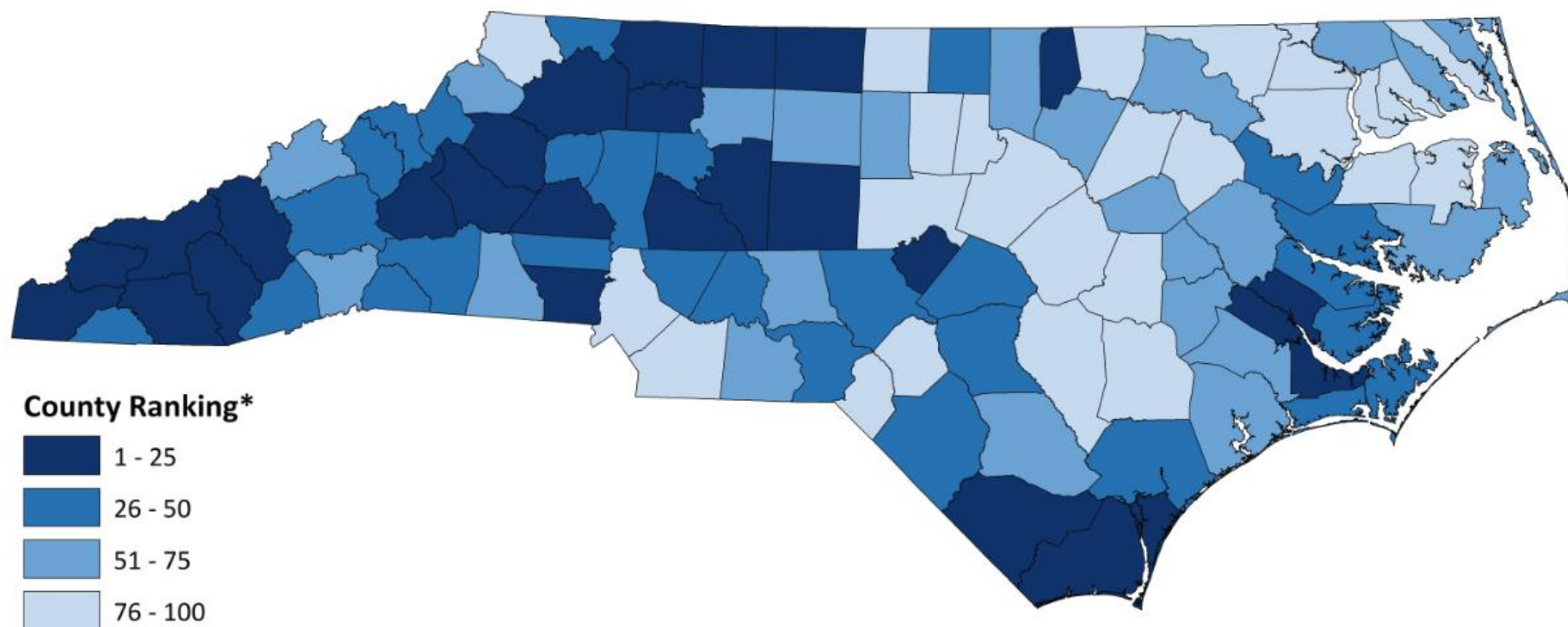
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County-level Burden Assessment—Overdoses and Infections

Aaron Fleischauer, PhD and Molly Hoffman, MPH

In 2016, we conducted a burden assessment of counties hardest hit by outcomes of the opioid crisis. We ranked counties based on overdose emergency department visits, acute hepatitis C (HCV) infections and other factors. In 2019, we are using 2016-2017 data on acute hepatitis B (HBV) and C infections, fatal and non-fatal overdoses, endocarditis infections and buprenorphine prescribing practices. These data are preliminary and a final report is expected by June 2019. The map below shows counties ranked into quartiles; a ranking of 1-25 demonstrates a higher burden of overdoses and infectious outcomes.



*Lower numbers indicate increased burden

Variables included below are pooled rates from 2016-2017: Acute HCV incidence, Acute HBV incidence, Rate of opioid overdose ED/EMS visits (all ED and only EMS encounters that are not treated and transported by EMS to a hospital), Rate of drug associated infective endocarditis hospitalizations, Rate of Buprenorphine patients, Rate of unintentional opioid or illicit drug related deaths.

Choose Safe Places: Keeping children healthy in the environments where they grow, learn, and play.

Jamie Pritchett, MTox

The environment plays a large role in children's health. Did you know that children are more at risk from exposures to harmful substances than adults? Children drink more water and breathe more air relative to their body size than adults do. Additionally, behaviors that are common in children, such as crawling or putting their hands or other objects in their mouths, can expose them to more chemicals. Because children are still growing and developing, exposures to harmful substances can have long-term impacts. Many children spend large amounts of time in child care facilities, making it important to keep these spaces safe from harmful substances. Currently, North Carolina child care licensing general statutes and rules do not address environmental exposures to hazardous waste at child care centers. Conversations with child care stakeholders indicated that environmental exposures are typically not considered when opening a child care center and a need exists to inform and educate child care providers and others involved in child care on this issue.

What is Choose Safe Places? The Choose Safe Places (CSP) program is a new initiative to protect children from harmful exposures to chemicals while attending child care centers. The CSP program works with child care providers and others stakeholders to ensure child care centers are located in areas free of harmful substances such as lead, arse-

nic, or volatile organic compounds. CSP considers four key elements when assessing environmentally safe child care locations:

Former uses of the site. Contaminants can stay on a site long after the activities that caused the contamination have stopped. Knowing what a property was used for in the past will help identify potential contaminants. For example, a building where manufacturing occurred may contain contamination or a property used as a landfill could have a variety of chemicals in soil or water. Just because a property was used for something previously does not mean it is not suitable for a child care center, but these situations should be further evaluated. Lead is a common contaminant in older buildings because lead paint was commonly used until it was banned in 1978.

Movement of harmful substances from adjacent properties. Chemicals can sometimes move through the air, water, and soil to neighboring buildings or properties, therefore it is important to observe nearby sites and activities that might create environmental exposures. Hazardous waste sites, dry cleaners, nail salons, and gas stations are some potential nearby activities to be aware of. Additionally, sometimes chemicals can travel through groundwater and then volatilize, or become gases, and enter buildings or homes. This is known as vapor intrusion, and some of these chemical vapors can be harmful when present in indoor air.

Presence of naturally occurring harmful substances. Naturally occurring contamination comes from substances already in the environment, rather than

from chemicals or other hazardous materials used or manufactured by humans. Radon is one of those naturally occurring contaminants. Radon seeps into homes from the rock under the building's foundation. In addition, arsenic and other metals can occur naturally; they may be present in soil or groundwater and may require further evaluation.

Access to safe drinking water. Drinking water that is piped into your home, school, or office comes from either a public water supply or a private well. Knowing about issues that can affect water quality is important for good health. Lead, nitrates, and bacteria are common water contaminants that can affect children's health. Public water systems are regulated by state and federal laws to ensure drinking water safety. However, private wells must be protected and maintained by property owners.

What are we doing to help? We convened an advisory group to guide the development of the CSP program and serve as a network of experts. This advisory group includes representatives from licensing agencies, organizations providing resources to child care centers and parents, a child care provider, a tribal government, and organizations focused on environmental issues.

We are currently developing, with experts in both child care and environmental exposures, educational and training materials for various audiences (e.g., providers, parents, inspectors) including an inspection checklist for child care providers to look for potential chemical hazards in child care centers.

For more information about CSP you may contact us at (919) 707-5900 or nchace@dhhs.nc.gov.



The North Carolina Public Health Preparedness and Response Branch (PHPR) has been selected to deliver three presentations at the 2019 Preparedness Summit in St. Louis, Missouri March 26 – 29, 2019. The Preparedness Summit is the longest running national conference on public health preparedness. It will feature experts from the healthcare, public health and emergency management fields to address the gaps between these life-saving industries to work more collaboratively and efficiently in the face of emerging threats. Staff from PHPR will present the following 3 abstracts:

- 1) Providing capacity building guidance and technical assistance to preparedness staff at the local level
- 2) Leveraging the state's syndromic surveillance system to collect operational readiness review data from local public health jurisdictions
- 3) Planning and monitoring issues of public health importance at the 2018 International Equestrian Federation World Equestrian Games

North Carolina's All-Hazards Planning Summer Institute: An Innovative Approach to Helping Local Health Departments Address Gaps in Public Health Response for Current and Evolving Threats

Yalonda Galloway, MPH CHES®; Shanae Godley, MPH

PHPR All-Hazards Planning Summer Institute is an innovative approach to helping local health departments (LHDs) address gaps in public health preparedness planning and response efforts. During the summer institute, presenters shared resources and tools that are used to enhance the work of preparedness staff in local public health jurisdictions across the state of North Carolina.

From June 25-July 27, 2018, PHPR offered the 2018 All-Hazards Planning Summer Institute to thirty-six (36) LHDs across the state. With 4-weeks of in-depth training content, the PHPR staff implemented eight webinars, twenty-four workgroup sessions, and twenty-four office hour sessions to assist LHDs with developing or updating their local public health all-hazards plans.

As a result of participating in the PHPR All-Hazards Planning Summer Institute, survey respondents self-reported a 42% increase in the amount of progress made in developing or updating their agency's all-hazards base plan. In addition, 96% of participants felt confident that they will be able to develop or update their all-hazards base plan with the guidance and tools provided during the PHPR All-Hazards Planning Summer Institute.

During the presentation at the 2019 Preparedness Summit, attendees will acquire three evidence-based resources that were utilized during the PHPR All-Hazards Planning Summer Institute and lessons learned that can be leveraged within their public health preparedness practices, including: (1) our assessment history and process, (2) the 'All-Hazards Planning Summer Institute' training design and curriculum, and (3) NC's local public health 'All-Hazards Planning Guidance Template.'

From planning to evaluation, PHPR All Hazards Planning Summer Institute proved to be beneficial to our local preparedness staff, in that 100% of respondents agreed that the program has helped them to better understand these objectives: (1) the concept of all-hazards planning in public health; (2) the all-hazards plan organization, as suggested in the National Response Framework (NRF); (3) how to utilize the tools and resources provided for all-

hazards planning; (4) the importance of including specific public health threats and their impacts in the base plan; (5) how to articulate types of access and functional needs and how to use the C-MIST Framework in plans; (6) the activities involved in restoring critical and normal health department functions to pre-incident level; and (7) when the demobilization process begins and how to communicate demobilization plans to the media and the public.

Furthermore, 100% of evaluation respondents agreed that they would recommend the Summer Institute. As we expand this program to other public health professionals in North Carolina, we are please to share it with other states and to receive peer feedback that might be beneficial to the betterment of our technical assistance opportunities.

Leveraging North Carolina's State Syndromic Surveillance System to Collect Operational Readiness Review Data for All 86 Local Public Health Jurisdictions.

Shanae Godley, MPH; William Krepps, PharmD

PHPR uses an innovative approach to collect Operational Readiness Review (ORR) data from all 86 local sub-awardees regardless of their Cities Readiness Initiative (CRI) status. Despite a decentralized public health structure, North Carolina's eighty-six (86) local/tribal health departments and districts are held to the same standards as the Centers for Disease Control and Prevention's (CDC) recognized CRI jurisdictions including ORRs and submission of all necessary supporting evidence.

During the session, attendees will learn how North Carolina leverages their existing state-wide syndromic surveillance system to develop an online ORR reporting tool that is accessible by all local jurisdictions regardless of CRI status. Attendees will also learn about the report that is generated by the system, that identifies strengths, areas for improvement, and clearly demonstrates a jurisdiction's progress towards CDC's goal of "established" by 2022.

North Carolina's Response to the World Equestrian Games

Valerie Lott, MPH, REHS; Christopher M. Prevatte; Veronica Bryant, REHS

PHPR supports and strengthens the abilities of our public health system to protect the public's health in disaster situations such as disease epidemics,

chemical and radiological releases, natural disasters, and mass gatherings. PHPR's planning for the 2018 International Equestrian Federation (FEI) World Equestrian Games (WEG), demonstrated a need for comprehensive integration of the preparedness system and other branches of public health. As a result, a multi-layered approach was undertaken to accomplish this task. This effort has significance to global health security and preparing the nation for emerging threats and is replicable to other jurisdictions.

The FEI WEG is held every four years in the middle of the Olympic cycle and is one of the biggest events on the global sporting calendar that combines eight equestrian World Championship caliber events. The 2018 edition of the FEI WEG was held in Mill Spring, North Carolina over thirteen days from September 11-23, 2018; during peak hurricane season. PHPR worked with Environmental Health, Communicable Disease, the State Public Health Laboratory, and the Rutherford, Polk, McDowell Health District in planning and response activities. With over 100 food vendors and 200 volunteers including state and local government employees, the WEG public health planning team used the National Incident Management System (NIMS) to manage food establishment permitting and inspections as well as disease surveillance. While preparing for the WEG, PHPR simultaneously assigned staff to hurricane response as North Carolina had been devastated by recent hurricanes, Hurricane Irene (2011) and Hurricane Matthew (2016).



PHPR monitors and strengthens the abilities of our public health and healthcare systems to protect the public's health, we strive to discover new and creative solutions to address emerging events and/or incidents. Whether we are providing capacity building guidance and technical assistance, leveraging syndromic surveillance systems for reporting, or planning and responding to internationally recognized events, we will continue to cultivate a multifaceted system that engages various sectors at the local, state, and federal levels to influence the diversity of thought and advance the capacity of our communities to prepare, respond to and recover from public health emergencies.

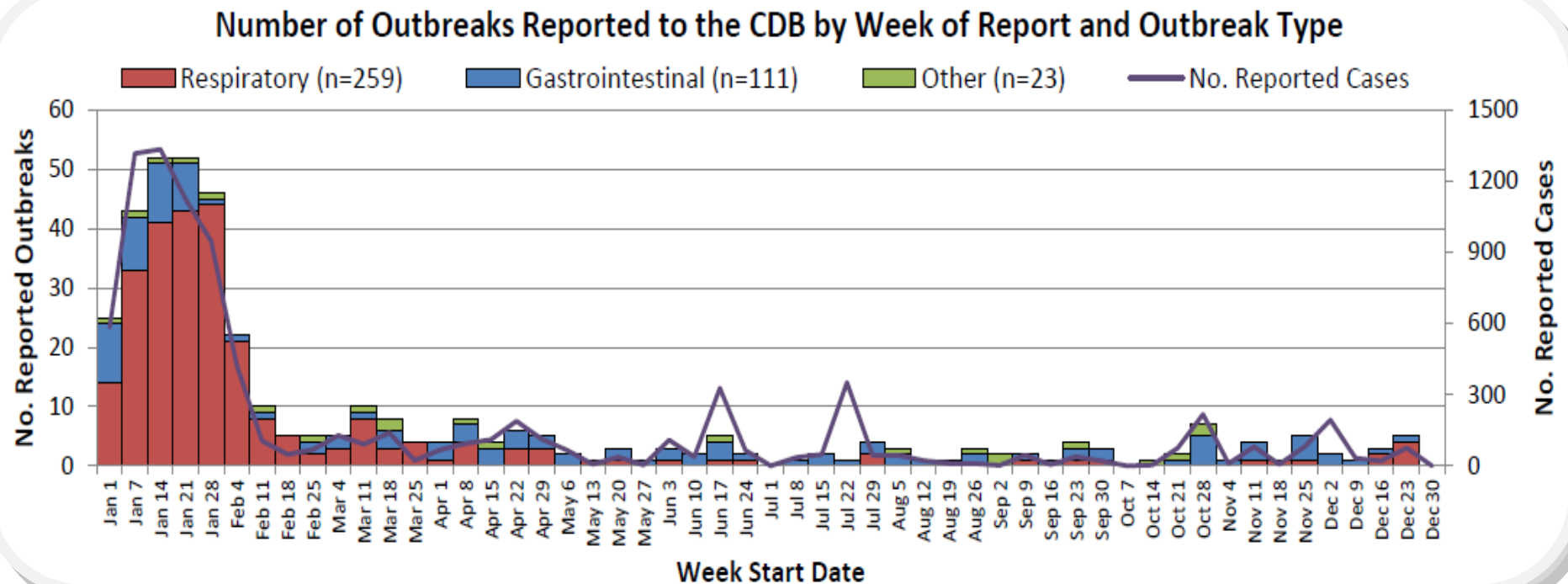


Outbreak Data Files: 2018

Justin Albertson, MPH

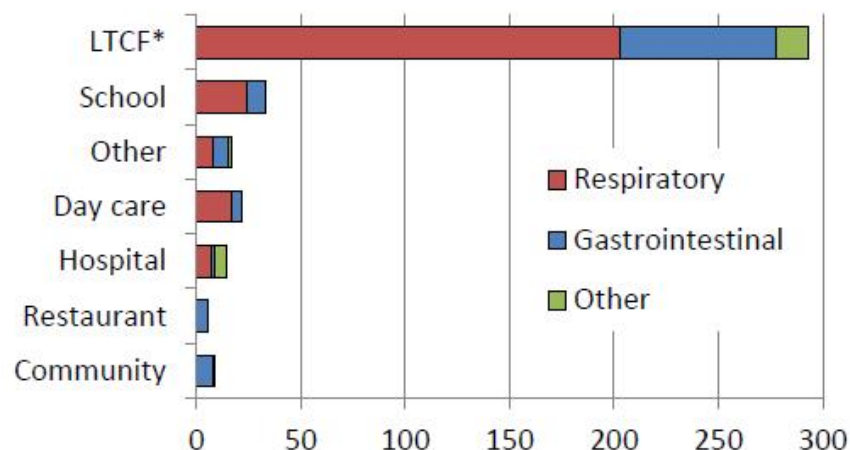
A total of **393** outbreaks were reported to the Communicable Disease Branch (CDB) from January 1 - December 31, 2018. Data shown below represent information provided through the North Carolina Electronic Disease Surveillance System (NC EDSS). A total of **9,025** outbreak-associated cases were identified in the 393 outbreaks: 5,041 (56%) from respiratory illness; 3,802 (42%) from gastrointestinal illness (GI); and 182 (2%) from other types. A median of 11 cases was identified in each respiratory outbreak (range 2-200), 24 in each GI outbreak (range 2-351), and 3 in each other outbreak type (range 1-49).

Long-term care facilities were the most common setting for a reported outbreak, and most of those were caused by influenza. Norovirus was the second most frequent cause of an outbreak. The state received more outbreak reports from Western counties than from those in the East.



Outbreak Data Files: 2018

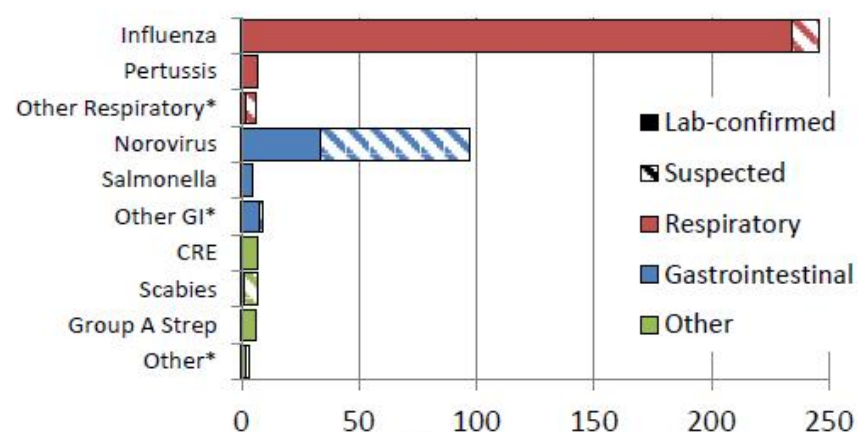
Setting (n=393)



*Includes nursing homes, adult care homes, and assisted living facilities

No. Reported

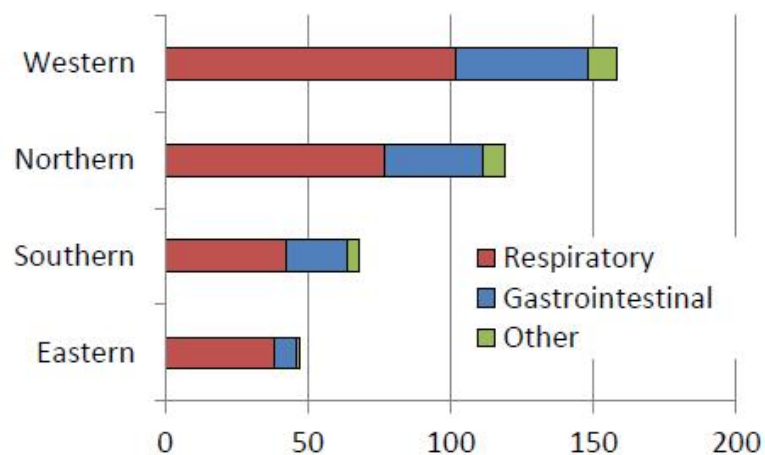
Etiology (n=393)



* Other: GI- Campylobacter, C. perfringens, Hepatitis A, STEC, S. aureus, Shigella; Respiratory- Hand, Foot, and Mouth, Parainfluenza, Varicella; Other-Conjunctivitis, Hepatitis B, P. aeruginosa

No. Reported

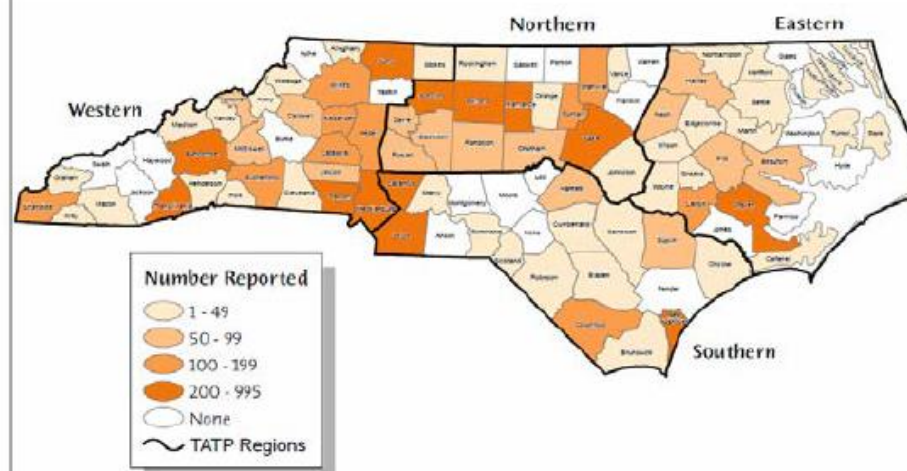
Number of Outbreaks by Region* (n = 392†)



*Regions: <http://tinyurl.com/TATPmap>

†One outbreak (Hepatitis A) is considered statewide

Outbreak-associated Cases by County (n=9,025)



Public Health response to the expansion of Lyme Disease

Alexis M. Barbarin, Ph.D.

The North Carolina Division of Public Health, Communicable Disease Branch Vector Borne Disease team conducts surveillance for human cases of vector borne disease including West Nile virus, Rocky Mountain spotted fever, and Lyme disease. The team is made up of one communicable disease nurse, two public health veterinarians, and two public health entomologists. The entomologists also participate in entomological surveillance, which is often guided by cases identified through human disease surveillance.

The expansion of Lyme disease from New England and the upper Midwest into the southern part of the United States has generated interest by the Centers for Disease Control (CDC) to better characterize Lyme disease in southern states.

In late January 2019, the Communicable Disease Branch hosted a one-and-a-half-day joint conference with the CDC to address southward Lyme disease expansion. States receiving CDC Epidemiology and Laboratory Capacity (ELC) funding, which targets Lyme disease, were invited to participate in a meeting to address key strategies to combat the impact of Lyme disease. Participants included representatives from CDC Bacterial Diseases Branch in Fort Collins, CDC Rickettsial Zoonoses Branch in Atlanta, Illinois, Indiana, Iowa, Kentucky, Michigan, North Carolina, Ohio, Virginia, and West Virginia.

Each state delivered an update on human Lyme disease case investigations and tactics the state has employed to curtail their incidence of Lyme disease. In addition to human case-based surveillance, many of these states participate in active and passive tick monitoring and collection programs. Only one state, Michigan, currently conducts its own testing of ticks for pathogens.

Ticks are tested for *Borrelia burgdorferi sensu stricto*, the causative agent for Lyme disease, *Anaplasma phagocytophilum*, the causative agent for anaplasmosis, and *Rickettsia* species, the causative agent for spotted fever group rickettsioses. States like Virginia and North Carolina currently send ticks collected in their respective states to CDC for pathogen testing. While many of the states are conducting active entomologic surveillance within their state, only North Carolina has developed a collaborative tick surveillance program that conducts entomologic surveys in North Carolina, Virginia, and Tennessee.



Many states, such as Illinois and North Carolina use *Fight the Bite* educational campaigns to encourage residents to fight Lyme disease through prevention. The NC Fight the Bite website is available here <https://epi.publichealth.nc.gov/cd/vector/contest.html>. Other states like Michigan have mounted robust Lyme prevention campaigns that were both wide reaching and holistic. See some of their information here: <https://www.michigan.gov/emergingdiseases/>.

What made the Michigan media campaign such a success was that beyond the standard ECL funding allocated for Lyme disease program development and educational outreach, there was \$20,000 dedicated for detailed media intervention provided by the Michigan Department of Environmental Health. Their front line was their emerging diseases website, which is a multi-agency site that provides information on both zoonotic and vector borne diseases. The website has CDC content imbedded into the site so that CDC updates are automatically integrated into Michigan's webpage. The Michigan Department of Health and Human Services provides tick submission kits, tick borne illness pamphlets and wallet cards, and the Michigan *Disease Mapper* website that can be accessed free of charge by healthcare providers and the public.

The goal of Michigan's media campaign was to increase awareness of the general public's risk for Lyme disease in Michigan and provide solutions for what residents could do to protect themselves. To determine how effective their methods were, they calculated website click-through rates. Goal one was to place graphical ads on mobile apps and websites to increase knowledge of Lyme prevention (0.49% click through rate). Goal two included placing paid ads on social media sites to increase traffic to the department's Lyme website (0.95% click through rate). Goal three, which was the most successful, included using paid search ads on the Google search engine (10.32% click through rate). Using Google analytics, Michigan determined that most of the Lyme related website page views occurred in sync with the peak activity of nymphal blacklegged ticks (April to July) and adult blacklegged ticks (October and November). This indicated that public health educational programming should center around these months to reach the greatest target audience.

Another concern many of the states shared was the recent appearance of the Asian longhorned tick, *Haemaphysalis longicornis*. The Asian longhorned tick is an invasive tick native to East and Central Asia including China, Korea, and Japan as well as Pacific Islands including Australia and New Zealand. While it is clear that it poses a threat to livestock health, the impact that the longhorned tick will have on human health in the United States is currently unknown. Disease transmission has only been documented in animals. Among animals, it has been linked to the transmission of anaplasmosis, ehrlichiosis, *Borrelia* species bacteria, and Severe Fever with Thrombocytopenia Syndrome Virus (SFTSV) in other parts of the world, but its vectoral capacity in the US is largely unknown. Of the states participating in the joint meeting, North Carolina, Virginia, and West Virginia have all identified *H. longicornis* ticks in at least three counties.

During the last half day of the meeting, Epidemiologists from CDC discussed

emerging rickettsial diseases, their distribution, and their expansion throughout the United States. Based on national case surveillance, spotted fever group rickettsiosis continues to cause more morbidity than ehrlichiosis and anaplasmosis nationwide; between 2010 and 2017, the annual incidence increased from 6.4 to 19.2 cases per million persons. While diagnostic testing techniques are becoming more and more precise, we do not have an effective test to differentiate rickettsiosis caused by *Rickettsia rickettsii* versus *R.*

parkeri or *R. amblyommatis* in humans. Eschar-associated rickettsial diseases (caused primarily by *R. parkeri*) are on the rise as well.

While many of the cases of eschar-associated rickettsial disease nationwide seem to be linked to international travel, others may be locally acquired, but are misdiagnosed as ehrlichiosis or anaplasmosis. The CDC is currently collecting DNA from rickettsial eschars to further characterize rickettsial infections across the US. Results will shed some light on which rickettsial pathogens are fueling the increase of spotted fever cases across the

country. Information regarding the CDC eschar associated rickettsial disease surveillance program can be obtained at the following link:

<https://www.cdc.gov/ncezid/dvbd/pdf/Collection-Submission-Eschar-Swab-Specimens-Rickettsial-Disease-508.pdf>

Each state was able to showcase programs that have been successful in Lyme disease surveillance, education and outreach. North Carolina was the first and only state to coordinate multi-state tick surveillance in the corridor of Lyme expansion. Going forward, the North Carolina Communicable Disease Branch plans to implement many of the tactics shared at the ELC meeting to ensure a more robust vector borne disease program.



Centers for Disease Control and Prevention, <http://phil.cdc.gov/phil/>

Changes in the Distribution of Heat-Related Illness Emergency Department Visits – North Carolina, 2009-2017

Kalyani Hawaldar, Lauren Thie, Jessica Rinsky, et al.

Background: Climactic changes are expected to affect patterns of heat-related illness (HRI) in North Carolina. Increases in temperature will increase exposures to heat amongst those who cannot avoid them, such as outdoor workers and those living with energy poverty. To better understand patterns in HRI over time, we assessed the frequency and distribution of HRI emergency department (ED) visits across North Carolina during the past 10 years.

Methods: To identify HRI ED visits occurring during January 1, 2009–December 31, 2018, we applied a previously validated ICD-9/ICD-10 and chief complaint-based case definition to data from the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). We modeled the number of HRI ED visits during the period using a Poisson model with independent variables indicating year and the maximum monthly temperature by month. We also described peaks in the number of HRI ED visits during each year, defined as three times the forward arithmetic moving average for the first half of the year and as three times the backward arithmetic moving average for the second half of the year. Finally, to determine whether the length of the heat season had increased over time, we compared the duration between the dates of the first peak and last peak during each year.

Results: During 2009–2018, 32,800 HRI ED visits were identified in North Carolina. The coefficient for year was positive, 0.047 (0.008, 0.086), with a significant p-value. No significant distribution in the number of peaks by year or the duration of the heat season was observed.

Conclusions: We observed an increase in the number of HRI ED visits in North Carolina during 2009–2018. These findings suggest that HRI ED visits have been increasing with increasing temperatures in North Carolina. As temperatures continue to rise, the incidence of HRI will likely increase, therefore it is important for researchers, public health officials, healthcare providers, and communities to continue to work together to prevent HRI.

Novel Serotype of Enteroinvasive Escherichia coli Associated with a Party — North Carolina, June–July 2018

Carolyn T. A. Herzig, Aaron Fleischauer, Brian Lackey, et al.

Background: On July 2, 2018, the North Carolina Division of Public Health was notified that ~38 members of an ethnic Nepali immigrant community were transported to area hospitals for severe gastrointestinal illness after consuming food at a potluck on June 30. We investigated to identify the cause of the outbreak.

Methods: We reviewed medical records, conducted a retrospective cohort investigation, and coordinated laboratory testing. A case of gastroenteritis was defined as diarrhea, vomiting, or temperature $\geq 100^{\circ}\text{F}$ in a person who consumed food from the party. One hospital used a commercial multiplex polymerase chain reaction (PCR) assay; the State Laboratory of Public Health (SLPH) employed culture for enteric pathogens and PCR for Shiga toxin genes *stx1* and *stx2*; and CDC used a molecular guided approach for isolation.

Results: Fifty-two of ~100 attendees met the case definition; 28 (54%) were hospitalized and 8 (15%) admitted to intensive care. Forty-nine attendees (35 ill) were interviewed. Although no specific food was statistically associated with illness, persons who ate chicken curry were more likely to become ill than those who did not (risk ratio: 1.47; 95% CI: 0.76–2.83). Food was not available for testing. Stool PCR assays from 25 persons were positive for *Shigella*/Enteroinvasive *Escherichia coli* (EIEC). However, among 24 specimens tested at SLPH, no enteric pathogens grew on culture media and all were PCR-negative for Shiga toxin genes. Ultimately, CDC identified novel EIEC serotype O8:H19 from 12 patient specimens.

Conclusions: A novel EIEC serotype caused the outbreak, likely through a food vehicle. This represents the first reported U.S. outbreak of EIEC in >40 years. *Shigella* was initially suspected based on preliminary PCR results and because domestic EIEC infections are rare. However, clinical and epidemiologic findings appeared more consistent with EIEC leading to use of advanced molecular methods and detection of a novel organism.

Targeted Biomonitoring for GenX and Other Per- and Polyfluoroalkyl Substances (PFAS)—North Carolina, 2018

Jamie R Pritchett, Jessica L Rinsky, Beth Dittman et al.

Background: On June 8, 2017, NC DPH was notified that perfluoro-2-propoxypropanoic acid (GenX) and other per- and polyfluoroalkyl substances (PFAS) had been detected in the Cape Fear River, an important drinking water source. The source was a chemical manufacturing facility. By September 2017, PFAS had been identified in surface water, air, and private wells close to the facility. In August 2018, NC DPH worked with local health departments and CDC to measure GenX and other PFAS in serum and urine of residents near the facility.

Methods: We selected 30 participants from households with the highest concentrations of GenX identified in their private wells; one adult and one minor (≥ 12 years old) were invited from each household. Participants must have lived in their home full-time, used their well as their primary drinking source prior to GenX detection, and had no known occupational PFAS exposure. Participants provided blood and urine samples and completed a structured interview. CDC analyzed serum for 17 PFAS and urine for 16 PFAS. We compared participants' PFAS levels to 2013–2014 National Health and Nutrition Examination Survey (NHANES) levels when available.

Results: Thirty residents (25 adults, 5 minors) participated, representing 25 households. All participants lived in the county for at least 10 years and had been using bottled water for drinking for 4–14 months. GenX was not detected in serum or urine (limit of detection=0.1 μ g/L). Nine PFAS were detected in serum. Median serum concentrations of PFHxS (2.1 μ g/L) and n-PFOS (5.45 μ g/L) were higher than those in NHANES (1.4 μ g/L and 3.5 μ g/L, respectively). The remaining 7 PFAS were found at concentrations similar to or lower than NHANES. Serum PFAS concentrations did not differ by gender, age, or years living in the county. One PFAS (PFHxA) was detected in one person's urine.

Conclusions: GenX was not detected in specimens from residents with documented exposure. This may be because residents had switched to bottled water and may indicate a short half-life. The higher concentrations of two older PFAS (PFHxS and n-PFOS) with long half-lives may reflect either past or ongoing exposure.

Trends in Reported Legionnaires' Disease in North Carolina, 2010–2017: Increasing Disease or Increasing Detection?

Carolyn T. A. Herzig, Aaron Fleischauer, J-M. Maillard et al.

Background: During 2000–2016 in North Carolina (NC), reported incidence of Legionnaires' disease (LD) increased approximately 4-fold, similar to national trends. To determine if increasing disease burden in NC is attributable to increased testing, we evaluated the number of LD diagnostic tests performed and positivity rate over time.

Methods: We requested reports for the number of LD diagnostic tests performed and number positive during 2010–2017, by year and test type (urinary antigen test [UAT], serology, culture, or other) from MicroNet members, representing all ~ 120 NC hospitals. We calculated percent of positive tests by year and test type and used Poisson regression to estimate changes in positivity rate over time.

Results: Twenty hospitals provided data; 544 tests were positive, representing 47% of reported LD cases during the same period. Analyses included data from eight hospitals with complete data for all years and test types, including five of NC's largest hospital systems. The total number of tests performed increased from 5,138 in 2010 to 9,729 in 2017. UATs were the most frequently reported test across all years (4,524 [88%] in 2010 to 7,487 [77%] in 2017); percent of positive UATs increased from 0.46% to 1.32%. Compared with 2010, rate of positive UATs was significantly higher in each year during 2014–2017; the highest rate occurred in 2017 (rate ratio [RR]: 2.85; 95% CI: 1.78–4.56). Results did not differ substantially when all test types or all hospitals were analyzed.

Conclusions: Diagnostic testing for LD and number of positive tests increased during 2010–2017; therefore, increased testing contributed to increases in reported LD. However, the positivity rate increased approximately 3-fold, suggesting that increased detection as well as increases in true incidence contributed to increasing disease burden. Identification of factors that contribute to increasing LD is necessary toward implementing effective prevention and control strategies.

NEWS and NOTES

Announcements

North Carolina Communicable Disease Conference 2019 Local Health Department Awardees

Spirit Award

Rizza Tonsay BSN, RN
Jamie Bragg RN, PHN III
Kristi S. Heath RN
Mary Backlund RN

VPD Outbreak Investigation & Response

Buncombe County Health and Human Services

Mighty Oak Award

Wayne County Health Department
Macon County Health Department

Public Health Epidemiologist
Pamela W. Firetti, MHA, BSN, RN

Healthcare Associated Infection Investigation & Response
Coty Brayboy MPH, RN

Anchor Award
Jenni Mullendore MSPH, MD

Influenza Surveillance and Outbreak Award
Surry County Health and Nutrition Center

Star Partner Award
Wendy Holmes RN
Carrie Brown MD, MPH
Burke County Health Department
Caldwell County Health Department
Catawba County Public Health

CSI Award – Communicable disease Surveillance and Investigation
Davida Akins RN, BSN

Welcome Dr. Virginia Guidry!

Head, Occupational and Environmental Epidemiology Branch



Please join me in welcoming Dr. Virginia Guidry to her new role as head of the Occupational and Environmental Epidemiology Branch. Dr. Guidry received a PhD in Epidemiology and a Master's degree in Maternal and Child Health from UNC Chapel Hill Gillings School of Global

Public Health. She has extensive experience working with environmental health issues, including in her most recent role as Science News Director with the National Institute of Environmental Health Sciences. We are very excited to have her on the team and I hope many of you will have a chance to meet her soon.

NEWS and NOTES

Employee of the Quarter, Announcements

Employee of the Quarter: Mike Prevatte Public Health Preparedness and Response



Mike coordinated, planned, and executed the public health support to a global event hosted in North Carolina, The 2018 World Equestrian Games. He coordinated the deployment and lodging of over 30 public health staff to a rural area of the state; set-up and operated a public health incident

command post; organized an incident command structure; and supervised the administrative, communications, communicable disease, and environmental health activities for the operation in order to protect the first responders, staff, and visitors of the games numbering over 10,000 per day over 2 weeks.

Most remarkably, in the almost simultaneous impact of Hurricane Florence to the state of North Carolina, he volunteered to remain at his post away from his family to ensure public health operations were uninterrupted.

His actions in a multiagency, multijurisdictional environment brought increased recognition to the work, purpose, and importance of public health.

Mike ensured that exposure of the first responders, staff, and worldwide visitors of the games to public health hazards were minimized.

Registration is NOW OPEN!

Please join us for two and half days of networking and presentations from local Preparedness Coordinators, State and Federal Public Health leaders, and partners, such as North Carolina Emergency Management, 2-1-1, the Hospital Preparedness Program, and many more!

Presenters will cover a variety of topics, including: Hepatitis A response, refugee population planning, access and functional needs populations, mosquitoes, and Point of Dispensing essentials.

You will not want to miss this event!

Registration:
Northwest AHEC
www.nwahec.org/57219

Registration Fees:
Early Bird - \$75 (by April 17, 2019)
Regular Fee: \$100 (after April 17, 2019)

Hotel Accommodations:
Embassy Suites by Hilton Greensboro Airport
Group Name: Preparedness & Response Annual Symposium
Group Code: PRA
Online reservations at:
<https://tinyurl.com/PHPR19SympLodge>
The conference room block is available for the period of May 14-17, 2019 – block is open until April 16th.

This activity is jointly-provided with Northwest Area Health Education Center (AHEC), a program of Wake Forest School of Medicine and part of the NC AHEC System.



2019 Annual North Carolina Public Health Preparedness and Response Symposium

*Coordinate, Communicate, Collaborate:
Building a Preparedness and Response Culture*

May 15-17, 2019
Greensboro, NC

The Conference Center at Guilford Technical
Community College
7908 Leabourne Road Colfax, NC 27235

This year's theme highlights the importance of partnerships within our communities using coordination, communication, and collaboration to build an overarching culture of preparedness and response for the citizens of North Carolina.

[Click Here to Register for the Symposium](#)

[Contact us with any Questions!](#)



NEWS and NOTES

Employee of the Quarter, Announcements



Communicable Disease Branch
(Epi 24/7 on-call)
919-733-3419

HIV/STD Program
919-733-7301
TB Program
919-733-3419

Occupational & Environmental and Epidemiology Branch
919-707-5900

Public Health Preparedness and Response
919-715-0919
PHPR Emergency 24/7
888-820-0520

Rabies Emergency
(Nights, Weekends, Holidays)
919-733-3419

State Laboratory of Public Health
919-733-7834

EpiNotes Editor: Aaron Fleischauer, PhD, MSPH

State of North Carolina | North Carolina Department of Health and Human Services
North Carolina Division of Public Health | Epidemiology Section
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